

REMARKS

In the final Office Action, the Examiner disapproved Fig. 2; objected to claim 5; rejected claim 3 under 35 U.S.C. § 112, first paragraph; rejected claim 1 under 35 U.S.C. § 112, second paragraph; rejected claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,449,247 Waschka, Jr. (hereinafter "Waschka"; rejected claims 4-11 under 35 U.S.C. § 103(a) as being unpatentable Waschka in view of U.S. Patent No. U.S. Patent No. 6,351,322 to Ransford et al.; rejected claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,229,631 to Sato et al.; rejected claims 4-11 rejected claims 4-11 35 U.S.C. § 103(a) as being unpatentable over Sato et al. in view of Waschka and Ransford et al.

Applicants propose to amend Fig. 2; and claims 1, 3, 5 and 9. Claims 1-11 are pending in the patent application.

Applicants propose to amend Fig. 2, subject to the approval of the Examiner, to include reference character 260 and a corresponding lead line to label internal performance monitor 260 in transmitter TX_w in optical communication network element 112. The changes are indicated on a copy of Fig. 2 submitted herewith. Applicants respectfully request the Examiner to reconsider and withdraw the objection to Fig. 2.

Applicants propose to amend claim 5 in accordance with the Examiner's proposal set forth at page 2 of the Office Action.

Applicants respectfully traverse the Examiner's rejection of claim 3 under 35 U.S.C. § 112, first paragraph. In formulating

the rejection under Section 112, first paragraph, the Examiner contends that the specification does not disclose a bit parity check independent of a bit error rate test, nor describe how such parity check and error rate test are independent. Applicants respectfully disagree. In order to expedite prosecution of the present application, however, Applicants propose to cancel the term "independent" in claim 3, thereby obviating the Examiner's rejection.

With respect to the Examiner's rejection of claim 1 under 35 U.S.C. § 112, second paragraph, the Examiner contends that the last three lines of claim 1 require clarification. Accordingly, Applicants propose to amend claim 1 to recite that a determination is made as to "which of the *N* optical communication channels has an associated bit error rate value is greater/less than a specified bit error rate value" (added test underlined). Applicants believe their proposed changes to claim 1 resolve any alleged ambiguity in the previous language equating a channel with a bit error rate. Accordingly, Applicants submit that proposed amended claim 1 meets the requirements of 35 U.S.C. § 112, second paragraph.

Applicants respectfully traverse the Examiner's rejection of claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over Waschka. Proposed amended claim 1 is not obvious in view of Waschka because the reference fails to teach or suggest each and every element of the claim. In particular, Waschka at least fails to teach the claimed method including the step of monitoring a signal quality for the bit error rate test signal at an input of

each of N optical transmitters, as recited in proposed amended claim 1.

Applicants incorporate by reference the arguments set forth in their response dated June 24, 2003.

In their response, Applicants argued that Waschka does not disclose or suggest monitoring each transmitter/receiver pair. To highlight this point, Applicants propose to amend claim 1 to recite a step of monitoring a signal quality of a bit error rate test signal at an input of each of N optical transmitters.

In the final Office Action, however, the Examiner indicated that the transmitter/receiver pair discussed in Waschka is monitored through "control units" (page 16 of the final Office Action). Apparently, the Examiner refers to data voice control unit 31, shown in Fig. 3 (and in greater detail in Fig. 4) of Waschka. Although Fig. 4 arguably shows a transmitter (TX in FSK modem 55) and a bit error rate signal (BER) being supplied to modem 55, the drawing does not illustrate any circuitry for monitoring the quality of the BER signals input to modem 55. The BER signals are simply supplied through circuits 57, 58 and 59 along line 74 without being monitored for signal quality. Accordingly, Waschka necessarily fails to teach the claimed method including the step of monitoring a signal quality of a bit error rate test signal at an input of each of N optical transmitters, as recited in proposed amended claim 1.

In light of the above-described deficiencies of Waschka, Applicants submit that proposed amended claim 1 is allowable over the applied reference and claim 2 is allowable at least due to its

dependence from claim 1.

Applicants respectfully traverse the Examiner's rejection of claims 4-11 under 35 U.S.C. § 103(a) as being unpatentable over Waschka in view of Ransford et al. Proposed amended claims 5 and 9 are similar to claim 1 in that each recites monitoring signal quality of a bit error rate signal input to a transmitter. As noted above, Waschka fails to teach or suggest this claimed feature. Accordingly, claims 5 and 9 are distinguishable over Waschka at least for reasons discussed above in regard to claim 1.

The secondary reference, Ransford et al., is relied upon by the Examiner allegedly for disclosing bit parity checking. Applicants respectfully submit, however, that even if such teachings are properly combinable with Waschka, the resulting combination of references would still fail to teach the claimed monitoring of signal quality of a bit error rate signal input to a transmitter, as recited proposed amended claims 5 and 9. Accordingly, amended claims 5 and 9 are allowable over both Waschka and Ransford et al. Further, claims 6-8 are allowable over Waschka and Ransford et al. at least due to their dependence from claim 5, and claims 10-11 are allowable at least due to their dependence from claim 9. Moreover, claim 4 is allowable at least due to its dependence from claim 1.

Applicants respectfully traverse the Examiner's rejection of claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over Sato et al. in view Waschka. The shortcomings of Waschka have been discussed in greater detail above.

Sato et al. discloses a simulator 15 (Figs. 1 and 12), which

"estimates BER" (col. 8, lines 47-53) based upon some measured parameters, but apparently does not actually generate a BER signal. At least for this reason, Sato et al. necessarily fails to teach or suggest the claimed method including the step of monitoring signal quality of the bit error rate signal input to a transmitter. Moreover, even if a bit error rate signal were generated and supplied to a transmitter (TX 10, for example in Fig.1), Sato et al. fails to teach or suggest monitoring the quality of such a signal. In particular, although a controller 116 is shown supplying signals to E/O component 113 in Fig. 12, Sato et al. fails to disclose monitoring the quality of these signals. Sato et al., like Waschka, fails to teach the step of monitoring a signal quality for the bit error rate test signal at an input of each of *N* optical transmitters, as recited in proposed amended claim 1.

In light of the above-described deficiencies of Sato et al. and Waschka, Applicants submit that claim 1 is allowable over the applied references and claim 2 is allowable at least due to its dependence from claim 1.

Applicants respectfully traverse the Examiner's rejection of claims 4-11 under 35 U.S.C. § 103(a) as being unpatentable over Sato et al. in view Waschka and Ransford et al. As noted above, proposed amended claims 5 and 9 are similar to claim 1 in requiring monitoring signal quality of a bit error rate signal input to a transmitter, a feature neither taught nor suggested by either Sato et al., Waschka nor Ransford et al. whether taken alone or in combination. Accordingly, in light of distinctions

highlighted above, Applicants submit that amended claims 5 and 9 are allowable over the Examiner's proposed combination of Sato et al., Waschka and Ransford et al., claims 6-8 are allowable over these references at least due to their dependence from claim 5, and claims 10 and 11 are allowable at least due to their dependence from claim 9. In addition, claim 4 is allowable at least due to its dependence from claim 1.

Applicants' proposed amendments are not deemed to raise any new issues requiring further search, but rather place their application in condition for allowance. Applicants respectfully request entry of this Proposed Amendment, and a timely issuance of a Notice of Allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0308. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

By: 

David L. Soltz

Reg. No. 34,731

Date: December 10, 2003

Attachment: Marked up copy of Fig. 2